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ABSTRACT

This study discusses the National Assessment of Educational Progress's national survey of educational achievement in art and demonstrates that it is feasible to evaluate children's drawings obtained with free response assessment techniques. Four art production exercises, each calling for pencil drawing responses, were administered during 1974-1975 to a sampling of 9-, 13-, and 17-year-olds. Four scoring systems were developed. To be considered valid each dimension within a scoring system had to be made mutually exclusive and constant across age groups, cover the variety of responses generated by different ages, and be sufficiently replicable to be useful for assessing changes in performance. Persons of high academic ability who had previous experience in judging and codifying written test responses were selected as scorers. None of them had any art training. Two additional persons with advance training in art were selected to train the scorers. Results show that the four scoring systems met the conditions necessary for their adequacy. Careful attention to scoring system exercise development and scorer selection and training makes it possible to test art achievement. The study includes one sample exercise and a scoring guide. Appendices include scored sample responses. (Author/RM)

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SYSTEMATIC JUDGMENT OF CHILDREN'S DRAWINGS

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National Assessment of Educational Progress

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Education Commission of the States

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Systematic Judgment of Children's Drawings

Sarah S. Knight
National Assessment of Educational Progress

In the past, art instructors have expressed reluctance to use art achievement testing because they felt the only adequate way to evaluate a student's achievement was on a one-to-one basis within the context of a specific class from a specific instructor. Any other method might inhibit creativity. There appears to be a growing concern however with the general level of students' art achievement beyond the bounds of individual instructor and classroom. Art instruction is usually a standard component of elementary and secondary education curricula in the United States, and an increasing number of persons in art education wish to know the general results of such instruction.

A national survey of educational achievement in art has been developed and administered during the last few years. Its purpose is to assess the achievement level of groups of students with respect to objectives commonly held to be important by art instructors across the nation. The exercises it contains were developed to address these objectives, including the objective "Produce works of Art," which is the focus of this study.

Scoring specifications are a vital part of all free response exercises. For Art, the scoring or judgment systems are the key to an adequate evaluation of the production responses, with their adequacy being determined by how well they fulfill the following conditions:

1. They must yield information in enough detail to reflect achievement of the objectives addressed by each exercise.
2. They must cover the range and variety of responses generated by a national sample of 9-, 13-, and 17-year-olds.
3. They must apply simultaneously and equally to responses from all three age groups. No single age group should have a handicap.
4. They must be sufficiently replicable to be useful for assessing changes in performance.

If it can be shown that these conditions can be met, especially the last, it will have been demonstrated that it is feasible to evaluate children's art works obtained with free response assessment techniques. This will contribute substantially to the measurement tools available to the art education community. To date there have been few large-scale attempts to systematize judgments about art productions;* none that have been objectives-referenced, or have included simultaneous consideration of such a wide variety of responses from such diverse ages.

METHOD

Art Exercises

This study is based on four Art production exercises administered during 1974-1975. Each of the exercises called for pencil drawing responses. Two exercises were administered to 9-, 13-, and

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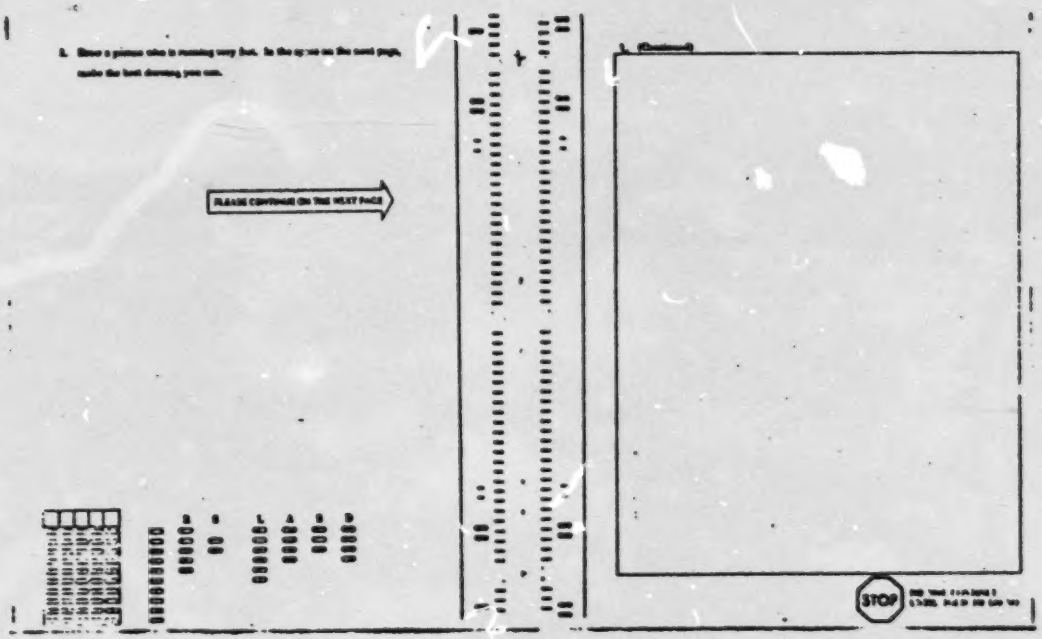
*The Advanced Placement Studio Arts Program of CEEB is an example of an assessment of Art production achievement of college-bound high school students.

17-year-olds ("Table," and "Bedroom Wall"), one was administered to 9- and 13-year-olds ("Running Person"), and one to only 9-year-olds ("Playground"). The exercise "Running Person" illustrates the format used for all four exercises.

Running Person



Running Person refers to Art Objective III D: "Produce works of art containing various visual conceptions."

Scoring Systems

Scoring systems were developed by a group of outstanding art educators. They strove to identify judgment dimensions that simultaneously reflected exercise objectives and art educators' special concerns about process and detail in each production response. Each dimension within a scoring system had to be made mutually

exclusive, constant across age groups, and had to cover the variety of responses generated by different ages. These conditions were met following revisions and reviews by colleagues.

Each exercise has a slightly different scoring system, depending on the objective of the exercise. All scoring systems however are based on multiple, conceptually separate scoring dimensions with ordinal levels of performance defined for each scoring dimension. Levels of performance are ordered by the degree of mastery displayed by the response specified for each level.

There is a scoring guide for each of the scoring systems. Guides are the scorers' working tools, giving the scorers ready access to both a verbal description of the scoring dimensions and extensive scored pictorial examples. Verbal descriptions were the common scoring referents while scored drawing examples were generally used only when unusual questions or problems arose. The verbal portion of the Running Person scoring guide is shown on page 5. Scored drawing examples for Running Person as well as the verbal description portions of the guides for Table, Bedroom Wall, and Playground are shown in Appendix A. All scored drawings are actual assessment responses, scored by art consultants.

The contributions of each dimension to an over-all estimation of achievement of the objective had to be specified. It was desirable to have the over-all score relatively uninfluenced by developmental differences in performance and therefore the amount contributed by each level of each dimension was held constant across ages. Thus for Running Person a 2 for Body received 2 points, a 2 for

SCORING GUIDE: RUNNING PERSON

LEGS:

0 = NO LEGS SHOWN.

1 = NO MOTION AT ALL; legs straight, parallel, unbent and there is an overall impression of no motion.

2 = LEGS DIFFERENTIATED; legs in scissors position and not bent.

3 = AT LEAST ONE LEG SLIGHTLY BENT (AT KNEE) OR BOTH LEGS BENT, BUT PARALLEL AS IN A JUMPING POSITION; the bend is a natural one, not a contortion of a normal bend.

4 = BOTH LEGS BENT - LEGS NOT PARALLEL.

5 = BOTH LEGS BENT WITH ONE GOING FORWARD AT THE UPPER PART OF THE LEG AND THE OTHER GOING BACKWARD AT THE UPPER PART OF THE LEG.

ARMS:

0 = NO ARMS SHOWN.

1 = ARM(S) APPEAR LIMP.

2 = ONE ARM BENT, OR BOTH ARMS BENT BUT PARALLEL, OR ARM(S) UNBENT BUT NOT EXTENDING FROM THE BODY.

3 = BOTH ARMS ARE BENT WITH ONE IN A FORWARD POSITION AND ONE IN A BACKWARD POSITION.

BODY:

0 = NO BODY SHOWN.

1 = STRAIGHT UP AND DOWN OR SLIGHTLY DIAGONAL; diagonality clearly contrary to the direction of the motion.

2 = BODY (TORSO) CLEARLY LEANING IN THE DIRECTION OF THE MOTION.

DEVICES: Expressive devices such as clearly flying hair, falling hat, finish line, both feet clearly off the ground, words in bubbles referring to running, tongues hanging out, dog chasing, etc.

0 = NO EXPRESSIVE DEVICES PRESENT.

1 = ONE EXPRESSIVE DEVICE PRESENT.

2 = TWO EXPRESSIVE DEVICES PRESENT.

3 = THREE OR MORE EXPRESSIVE DEVICES PRESENT.

Arms received 1 point, and so forth, regardless of respondent age. Moreover, the same number of points were needed for an acceptable performance from respondents of any age. Developmental differences would be shown most clearly by different combinations or patterns of levels across scoring dimensions rather than explicitly by the total score. For example, as many 9-year-olds might get an acceptable total score for Running Person as 17-year-olds, but most of their points might come from the Devices dimension while most of the 17s' points might come from Body and Legs. Thus the scoring systems preserve information about developmental differences in responses while scoring dimensions and the rules for combining them are applied equally for all ages.

Selecting and Training Scorers

Persons of high academic ability who had had previous experience in judging and codifying written test responses were selected as scorers. None of them had had any art training. Two additional persons with advanced training in art were selected to train the scorers and monitor the scoring process.

For each production exercise, the same general training procedure was used: 1) Scorers reviewed each scoring dimension and all example drawings for that dimension. 2) Scoring trainers explained and elaborated on any areas of uncertainty. 3) Scorers each scored a small, representative set of real responses. Each of the real responses had been scored previously by the art experts. 4) Results of the scoring trail-run were reviewed and discussed by the group until concensus was reached. 5) Steps 3 and 4 were

repeated with another small set of real responses. An adequate level of agreement between scorers on "score" assignments was attained at this point. If interscorer agreement had not been sufficient, steps 3 and 4 would have been repeated until it was.

One-half of the scorers were trained to evaluate responses from two of the exercises; the other half were trained to evaluate responses from the other two exercises.

Scoring Replication

Scoring or judgment replicability was estimated for each exercise with standard sets of actual responses. Exercises administered to more than one age group had standard sets made up of 10 or 15 responses per age group for a total of 30 responses. The Playground exercise was given only to 9s and its standard set had a total of 15 responses. See Table 1, below. Responses for each standard set were selected randomly from approximately 2600 responses available per age per exercise.

Table 1

Scoring Replication

Exercise	No. of Scorers	Responses per Standard Set
Running Person	9	30 (15 from each age)
Table	6	30 (10 from each age)
Bedroom Wall	6	30 (10 from each age)
Playground	6	15 (all from 1 age)

Scorers had a larger task of evaluating all free response assessment exercises for Art, including the 4 drawing exercises. They scored the standard response sets once when they had done about one-third of the overall scoring assignment and again when all regular scoring was completed.

Scorers dealt with only the standard sets for exercises on which they were trained. Each set was evaluated both times by the same 6 scorers (9 scorers were trained to score Running Person, therefore all 9 evaluated that standard set).

RESULTS

Scoring System Content

The 4 scoring systems appear to have met the first 3 conditions necessary for their adequacy. First, they are capable of yielding information in sufficient detail. This was accomplished to the satisfaction of art consultants and their colleagues during scoring system development. Second and third, the scoring systems clearly accounted for responses from all age groups and were applied equally across ages. Again, this was a feature established during scoring system development. Supporting evidence comes from the overall assessment applications: throughout the evaluation process, dimensions and associated levels were robust, they did not have to be altered beyond minor elaborations on level definitions. The scoring systems shown in this paper are, in all essentials, the same as those used to score the entire 2600 assessment responses per age for each of the 4 exercises.

Scoring Replicability

Inter-rater reliability coefficients were used to estimate replicability. An analysis-of-variance with repeated measures model was used to generate the reliability coefficients for each scoring dimension at each evaluation time. For each analysis, variance was partitioned into that due to scorers, to responses and to scorers by responses interaction. Scorers was a fixed factor, and responses was a random factor. The reliability coefficient:

$$r = 1 - \frac{MS_{scorers \times responses}}{MS_{responses}}$$

represents the reliability of the average rating. Resultant reliabilities are shown in Table 2.

DISCUSSION AND CONCLUSIONS

Drawings and other art productions tend to be difficult to evaluate meaningfully and consistently for as many responses as would be found in several art classes, difficulties which are greatly magnified when thousands of drawings must be evaluated. Clearly however, careful attention to scoring system/exercise development, scorer selection and training can go a long way toward alleviating the problems. As with any test item, when the task assigned is clearly focussed it is possible to specify an evaluation system that will yield directly relevant information. Given conceptually simple scoring dimensions defined with a minimum of esoteric language, it appears feasible to have persons without

Table 2

Inter-rater Reliability Coefficients

Exercise	Dimension	Time	Reliability
Bedroom Wall	Elements Related	1	.93
		2	.94
	Wall Shape	1	.93
		2	.94
	Door Function	1	.92
		2	.97
	Unusual Design	1	.79
		2	.73
	Novel Combination	1	.46
		2	.80
Table	Table Top	1	.91
		2	.94
	Table Legs	1	.92
		2	.95
	Chair Legs	1	.93
		2	.95
	No. Figures	1	.96
		2	.99
	Figure Complete	1	.84
		2	.90
	Figures Seated	1	.96
		2	.94
	Figures on 4 Sides	1	.94
		2	.98
	Figures Overlap Table	1	.99
		2	.98
	Table Overlaps Figure	1	.95
		2	.94
	Figure Overlaps Figure	1	.93
		2	.97
	Near Figure Lower	1	.96
		2	.96
	Distant Figure Higher	1	.97
		2	.97
Playground	No. Figures	1	.95
		2	.98
	Far Figure Hi	1	.999
		2	.98
	Far Figure Small	1	.91
		2	.93
	Figure Overlap Figure	1	*
		2	**
	Objects Present	1	*
		2	.96
	Point Perspective	1	*
		2	**
	Figure Overlap Object	1	.99
		2	.98
Running Person	Legs	1	.99
		2	.99
	Arms	1	.95
		2	.94
	Body	1	.92
		2	.92
	Devices	1	.98
		2	.98

*No variation was attributable to responses.
**Scorer x response variance very small and equal to variance due to responses.

specific training in art make relatively complex judgments about art works. Monitoring of on-going scoring indicated that there were few problems beyond unfamiliarity with essential art vocabulary. The few remaining difficulties were such that the art experts also viewed them as problems to be resolved with discussion and extended reference to the extensive scored samples.

Inter-rater reliability reflects the stability of scoring dimensions (and thus scoring systems) across different scorers, suggesting the likelihood that other scorers at another time would react as the present ones did. Reliability coefficients for this study are generally more than adequate support for the expectation of comparable evaluations by other scorers. It should be noted that the potential for interference in both learning and remembering the four drawing scoring systems was great. Scorers also learned to use four other, unrelated art scoring systems and had to apply all eight systems during the same time period in an alternating pattern. Moreover, scorers judged about 16,000 non-drawing responses between the first and second standard set evaluations. During this 6-week period both sets of inter-rater reliability coefficients remained equally high.

The lower levels of inter-rater reliability are from those dimensions requiring judgments about the creativity shown in Bedroom Wall drawings. These will always depend on the scorers' personal frame of reference and thus can be expected to be less reliable.

The standard response set as well as the complete assessment response set for Playground contained little or no variation on dimensions of figure overlapping figure, objects, and point-perspective. It was therefore difficult to estimate how reliably they were used. It is interesting to notice that scorers did agree on the dimensions. At least 5 out of 6 scorers agreed with each other 100% of the time for all three dimensions both times they were judged.

Art productions as well as other types of responses that are usually thought to be amenable only to holistic evaluation techniques are thus demonstrated to be open to more objective, detailed evaluations. Evaluations that are reliable as well as directly related to holistic evaluations, evaluations that are capable of showing age differences while not being age-bound are clearly shown to be practical.

Appendix A

for

Systematic Judgment of Children's Drawings

SCORED SAMPLE RESPONSES

Exercise 304011-1,2 RUNNING PERSON

NOTE: The scores for each sample are shown in the lower right corner of each page, space permitting (otherwise they appear in the most convenient blank space on the response page). Each response is scored on several dimensions or scoring categories, and the number of the score received on each of these is circled. For example, if the respondent drew a running person whose legs showed motion, one leg bent and going forward and the other bent and going backward with upper legs positioned correctly; arms correctly bent for running; body leaning in the direction of motion; no special expressive devices (DEV) present; the scoring would look like:

RATE:	0	(1)	7	8	9	
LEGS:	0	1	2	3	4	(5)
ARMS:	0	1	2	(3)		
BODY:	0	1	(2)			
DEV:	(0)	1	2	3		

RUN

RATE:	0	(1)	7	8	9		BODY:	0	(1)	2				
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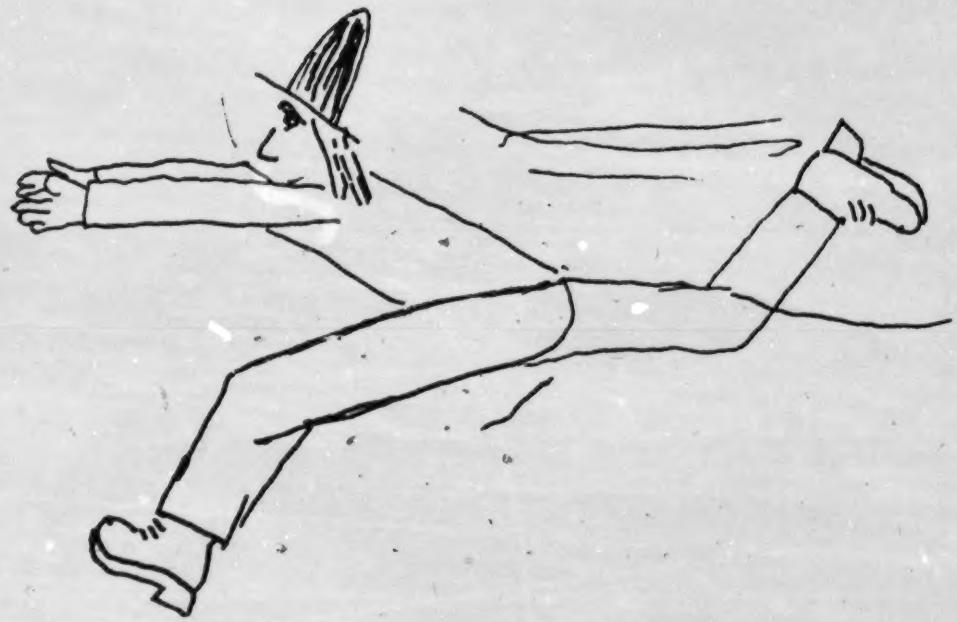
ARMS:	0	1	(2)	3										



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ARMS:	0	1	(2)	3							

RUN

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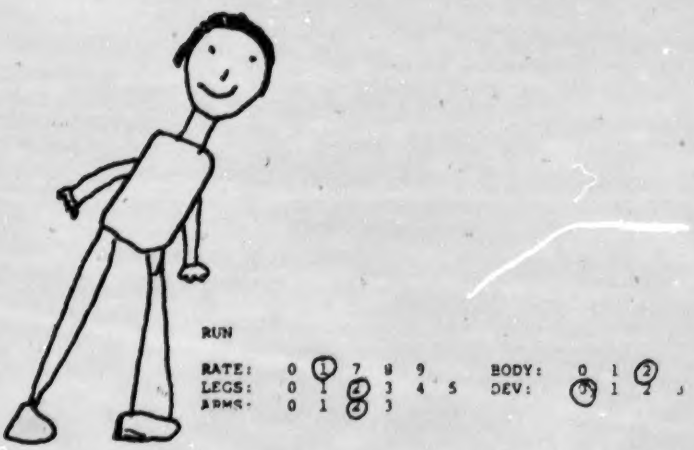
ARMS:	(0)	1	2	3							



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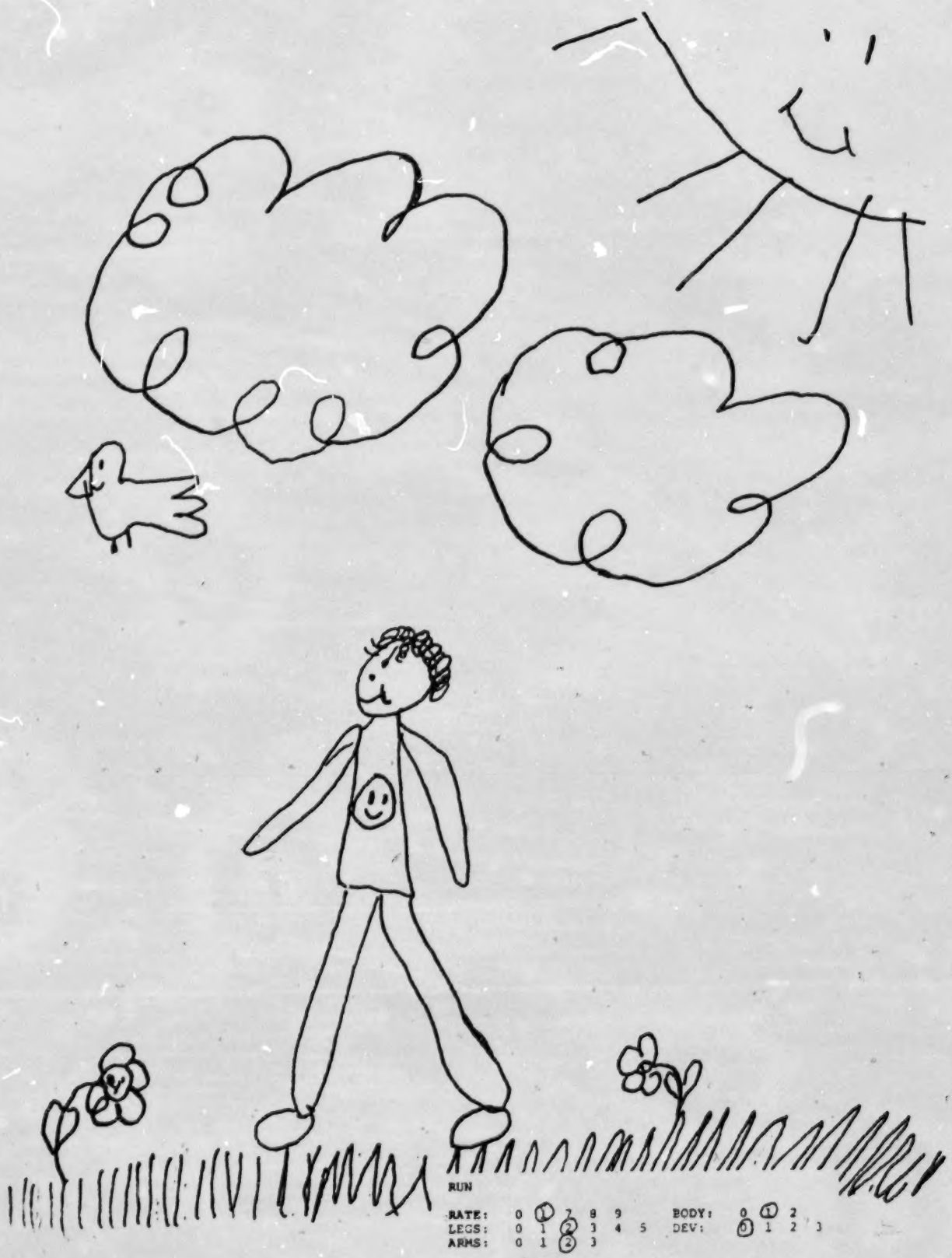
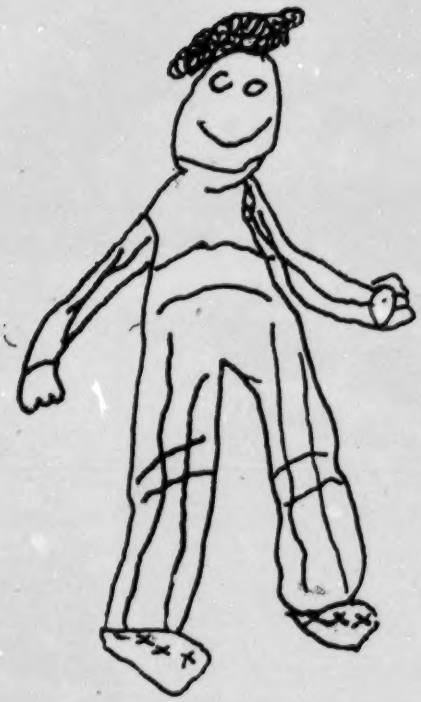

RUN
RATE: 0 1 7 8 9
LEGS: 0 1 2 3 4 5
ARMS: 0 1 2 3
BODY: 0 1 2
DEV: 0 1 2 3



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ARMS:	0	1	(2)	3							

RUN

RATE: 0 (1) 2 8 9
LEGS: 0 1 (2) 3 4 5
ARMS: (0) 1 2 3

BODY: 0 (1) 2
DEV: (0) 1 2 3

RUN

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ARMS:	0	1	(2)	3						

RUN

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ARMS:	0	1	(2)	3							

RUN

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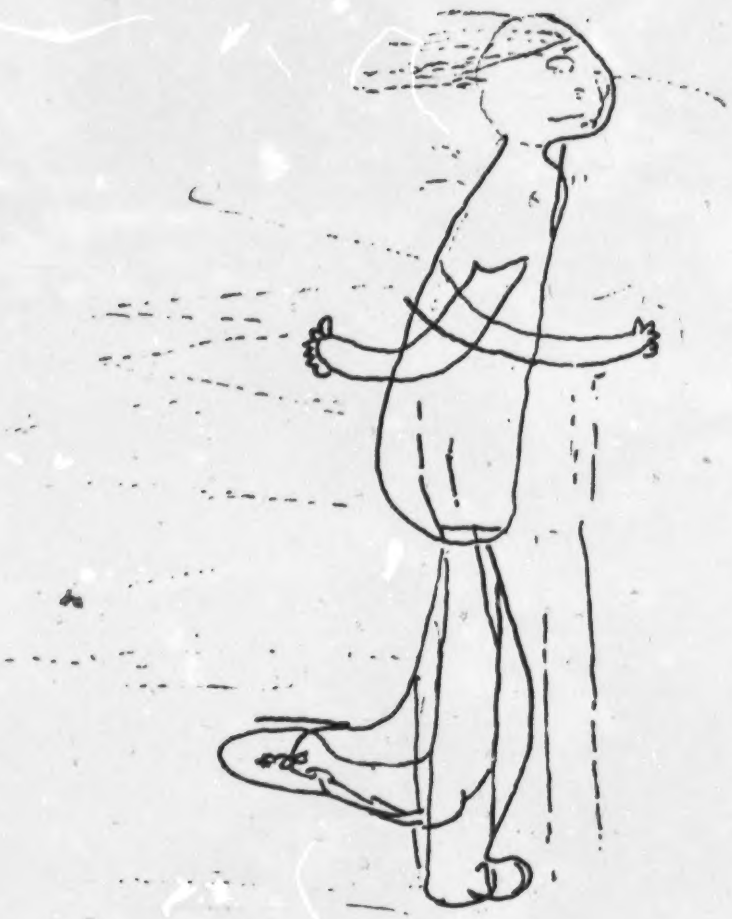
ARMS:	0	1	(2)	3							



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ARMS:	0	1	2	(3)							

RUN

RATE: 0 1 7 8 9
LEGS: 0 1 2 3 4 5
ARMS: 0 1 2 3

BODY: 0 1 2
DEV: 0 1 2 3

RUN

RATE:	0	1	7	(8)	9		BODY:	0	1	2	
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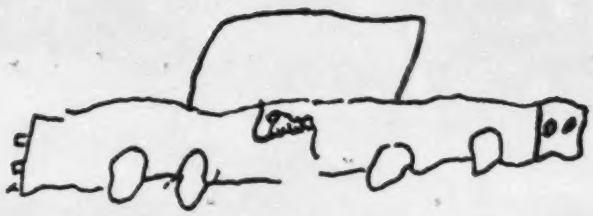
ARMS:	0	1	2	3							



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ARMS:	0	(1)	2	3						

RUN

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ARMS:	0	1	(2)	3							

31

RUN

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ARMS:	0	1	(2)	3							

32

RUN

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ARMS:	0	1	(2)	3							

RUN

RATE:	0	(1)	7	8	9	BODY:	0	1	(2)	
LEGS:	0	1	2	(3)	4	5	DEV:	0	(1)	2	3
ARMS:	0	1	2	(3)							

RUN

RATE:	0	(1)	7	8	9		BODY:	0	(1)	2	
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ARMS:	0	1	(2)	3							

RUN

RATE:	0	(1)	7	8	9		BODY:	0	(1)	2	
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ARMS:	0	1	(2)	3							

RUN

RATE: 0 6 7 8 9
LEGS: 0 1 2 3 4 5
ARMS: 0 1 2 3

BODY: 0 1 2
DEV: 0 1 2 3

RUN

RATE: 0 1 7 8 9
LEGS: 0 2 4 5
ARMS: 0 1 2 3

BODY: 0 1 2 3
DEV: 0 1 2

RUN

RATE:	0	(1)	7	8	9		BODY:	0	(1)	2		
LEGS:	0	1	2	3	(4)	5	DEV:	0	(1)	2	3	
ARMS:	0	1	(2)	3								

RUN

RATE:	0	(1)	7	8	9		BODY:	0	1	(2)	
LEGS:	0	1	2	3	4	(5)	DEV:	0	1	(2)	]
ARMS:	0	1	2	(3)							

RUN

RATE:	0	1	7	(8)	9		BODY:	0	1	2		
LEGS:	0	1	2	3	4	5	DEV:	0	1	2	3	
ARMS:	0	1	2	3								

SCORING GUIDE: TABLE/4 PEOPLE

GENERAL:

Foreshortening (perspective) is one of the major concepts involved in this exercise. Foreshortening refers to representing 3 dimensional space on a 2 dimensional plane. This means that on a piece of paper, we create an illusion of what we see. There are certain techniques that help to create this sense of space. They include:

1. Converging lines - this accounts for the front edge of a table top being longer than the back edge, and table legs and chair legs being shorter in the back than in the front.

2. Overlap - figures or objects cover one another and thus are helped to appear closer to the viewer or farther away.

3. Higher, lower - figures or objects higher on the picture plane (page) appear to be farther away from the viewer and things lower appear to be closer.

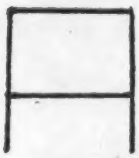
4. Larger, smaller - larger things appear closer to the viewer and smaller things appear to be farther away. This last factor is not included in the scoring of the table exercise.

TABLE_TOP

0 = NO TABLE PRESENT

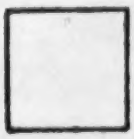
1 = TILTED PLANE, SHOWING FORESHORTENING. The top of the table is visible with near edge shown wider than the far edge so that the table appears to recede.

2 = TILTED PLANE, NOT SHOWING FORESHORTENING. The four sides of the table are parallel or nearly parallel.



3 = EYE LEVEL/PROFILE VIEW. Full table top is not shown, only the profile. If there is a tablecloth on the table, a bottom line for the cloth is taken as an indication that the table cannot be seen through it.

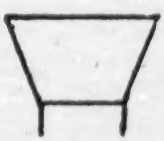
4 = BIRD'S-EYE VIEW. The table is drawn as though the viewer were at point above the table center. A bird's-eye view is one in which the figures shown are consistent on each side of the table, that is, the figures radiate from the table, or form a pattern around the table. If at least one figure is inconsistent (seen from the side) then the table is scored as a titled plane.



Circular tables are scored only as bird's-eye views. If the top is shown as an oval however, it is foreshortened. Note that in such a case it cannot be a tilted plane not showing foreshortening. (Category 2 of Table Top).

5 = TABLECLOTH SHOWN ON TABLE. The table is covered by a cloth, making it <u>impossible</u> to determine a tilted plane, foreshortening or eye-level views. This category is to be used only if it is completely unclear whether or not one of the earlier categories applies.

6 = REVERSED, RECEDING PLANE. The table top is shown with reverse forshortening so that the far edge is wider than the near edge.



7 = OTHER. Two or more of the above categories are combined in the response.

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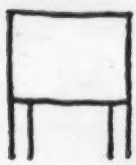
TABLE LEGS

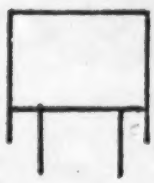
0 = NO TABLE LEGS SHOWN

1 = TABLE LEGS ARE SHOWN FORESHORTENED. The near table legs are drawn longer and lower and the far legs are drawn shorter and higher. Table top foreshortening is NOT necessary. Table pedestals are considered to be foreshortened. If the far table legs are hidden under the table but would be foreshortened if they had been shown, credit is given.

2 = TABLE LEGS ARE NOT SHOWN FORESHORTENED. The table legs have been drawn the same length or with far legs longer and lower than near legs, or with far legs longer and on the same level as near legs.



Legs the same length.



Far legs longer and lower than near legs.

Far legs longer and on the same level as near legs.

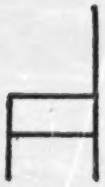
CHAIR/STOOL LEGS

0 = NO CHAIR OR STOOL LEGS SHOWN

1 = CHAIR OR STOOL LEGS FORESHORTENED. In instances where it is difficult to distinquisn chair legs and a figure's legs, the drawing is scored either for chair legs or for figure completeness but not both.

The chair legs should be shown with near legs longer and lower than far legs. Credit is given if at least one chair is shown with these characteristics. Chair pedestals are considered foreshortened. Three legged chairs receive credit for foreshortening if one leg is both higher and shorter than the other two legs.

2 = CHAIR OR STOOL LEGS ARE NOT FORESHORTENED.



NUMBER OF FIGURES

Note: Partial figures are counted but are not considered complete. Many drawings include the respondent as a viewer of the table scene, but that figure is not counted.

0 = NO FIGURES SHOWN.

1 = 1 FIGURE SHOWN.

2 = 2 FIGURES SHOWN.

3 = 3 FIGURES SHOWN.

4 = 4 FIGURES SHOWN.

5 = 5 OR MORE FIGURES SHOWN.

FIGURES COMPLETENESS

1 = FIGURES SHOWN ARE COMPLETE. Parts of figures (arms, legs) shown where they would be expected to be. If figure parts are obscured by a table cloth or some other object, credit is given. As many figures as are drawn are scored. It is not necessary to have 4 figures.

2 = FIGURE PARTS NOT SEEN WHERE THEY WOULD BE EXPECTED TO BE VISIBLE.

FIGURE_SEATED

1 = FIGURES ARE SHOWN SEATED. Figures to the left and right of the table must be seated, with seats on or nearly on the chairs, upper legs parallel to the chair seat and legs bending at the knees. Figures must always be seated ON SOMETHING rather than floating.

If left or right, or even left and right figures are missing, credit is given if the figures shown are clearly seated.

If legs are bent, but other criteria are present, credit is given if the figure can be determined to be a child.

If the side figures are firmly seated but the table obscures their legs, credit is given.

2 = FIGURES ARE NOT SHOWN SEATED. That is, the figures are shown standing on chairs, or they are shown from a bird's-eye view and it is not possible to tell whether they are seated, etc.

FIGURES AT 4 SIDES

1 = ONE FIGURE AT EACH SIDE. The figures must be placed at the table sides and NOT at the corners. There should be at least one figure per side.

2 = FIGURES NOT SHOWN ONE PER SIDE.

FIGURE OVERLAPPING TABLE

1 = AT LEAST ONE PORTION OF ONE FIGURE OVERLAPS (COVERS) THE TABLE. Instances such as a hand on top of the table in a profile view is NOT an overlap, nor is any instance where lines of one part continue through another part without any attempt to shade or erase.

2 = NO FIGURE OR PORTION OF A FIGURE OVERLAPS THE TABLE.

TABLE OVERLAPPING FIGURE

1 = TABLE OVERLAPS THE FAR FIGURE OR A PORTION OF ANOTHER FIGURE. In profile views, if the far figure does not continue under the table, there is no overlap.

2 = TABLE DOES NOT OVERLAP FIGURE. The table is not considered to overlap a figure in bird's-eye views.

FIGURE_OVERLAPPING_FIGURE

1 = ONE FIGURE OVERLAPS ANOTHER. One part of a figure is represented as being in front of a portion of any other figure.

2 = NO FIGURE OVERLAPS ANOTHER. No figure or portion of a figure is shown overlapping another.

NEAR_FIGURE_LOWER

1 = NEAR FIGURE IS SHOWN LOWER. Near figure is presented lower than the side figures, as determined by looking at the figure's feet rather than their heads. Credit is given even if there is only one side figure, if the near figure is clearly lower than the side figure and lower than where the other side figure would be if the drawing were finished.

2 = NEAR FIGURE NOT SHOWN LOWER.

FAR_FIGURE_HIGHER

1 = FAR FIGURE IS SHOWN HIGHER. The far figure is presented higher than the side figures as determined by looking at the heads or feet (if visible) of the figures.

2 = FAR FIGURE IS NOT SHOWN HIGHER.

SCORING GUIDE: BEDROOM WALL

INTEGRATION

ELEMENTS RELATED: Elements (representations of objects and qualities such as lines, shapes and textures) are related if they are shown with consistent repetition. The elements are considered for repetitive shapes; consistency of line quality; ordered placement of objects in juxtaposition; repetition and consistency of tonal qualities, and any additional techniques that were used to contribute to the total design integration through consistent use.

If elements are neither more or less related, but are about evenly divided between related and not related, credit is given.

If the treatment of the door is judged to be important to the overall relatedness of the design established on the wall, credit is given only if the door carries through the feeling of relatedness.

Large heads or faces are generally considered to contain only one element. However, when such a drawing is complex, credit is given if tone and line quality, in addition to subject matter, contribute to relatedness.

1 = ELEMENTS RELATED

2 = ELEMENTS NOT RELATED

WALL SHAPE: The design fits successfully within the shape of the wall. It has elements that flow into the larger space above the door and does not crowd either the door space or corners or edges of the picture. There should not be awkward, empty spaces in the design.

1 = DESIGN SUCCESSFULLY FITS SPACE

2 = DESIGN DOES NOT SUCCESSFULLY FIT SPACE

DOOR FUNCTION: The door functions as an integral part of the overall design. The door treatment completes the wall design, or is the focal point of the wall design, or contains a repetition of a larger motif. The door can be blank if the space thus created functions as an element in the overall design.

If only the door (and not the wall) has a design on it, credit is given. However, if the design consists of a border treatment around the door frame, credit is not given.

1 = DOOR FUNCTIONS IN OVERALL DESIGN

2 = DOOR DOES NOT FUNCTION IN OVERALL DESIGN

IMAGINATION

UNUSUAL DESIGN: The design must be novel. Novelty or strikingness can be obtained through the unusual use or scale; the use of objects not conventionally found in bedrooms or found on bedroom walls; formal design aspects that give the space an especially vivid effect on the viewer; the use of conventional objects with unconventional treatments.

1 = DESIGN CONTAINS UNUSUAL ASPECTS

2 = DESIGN DOES NOT CONTAIN UNUSUAL ASPECTS

NOVEL COMBINATION: Subject matter combinations are considered in this category. Design elements must be combined in a novel manner, where novelty of combination is achieved through unexpected objects placed next to each other or combined into a single object; the use of surprising size combinations; contrasts composed of very different shapes.

1 = DESIGN CONTAINS ELEMENTS IN NOVEL COMBINATION

2 = DESIGN DOES NOT CONTAIN ELEMENTS IN NOVEL COMBINATION

SCORING GUIDE: PLAYGROUND

NUMBER OF FIGURES: To be counted as a figure, there must be a head, neck and some indication of shoulders or collar drawn.

0 = NO FIGURES REPRESENTED.

1 = 1 FIGURE REPRESENTED.

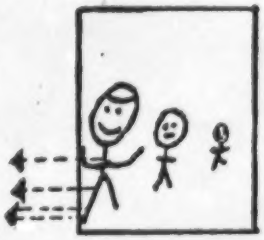
2 = 2 FIGURES REPRESENTED.

3 = 3 FIGURES REPRESENTED.

4 = 4 OR MORE FIGURES REPRESENTED.

FIGURES PROGRESSIVELY HIGHER: Figures must be 1/4" higher than each preceding figure, for all drawings in which figures are several inches tall. When very small figures (under about one inch) have been drawn, the proportional relationships changed, thus the rule-of-thumb illustrated below is applied.

Each figure must stand at least 1/8" higher than the preceding figure. The measurement is determined as shown.



Higher is considered to mean higher on the ground plane established by the picture, rather than the plane established by the page. Credit is given in instances where a low eye level view of figures is drawn that is successful in portraying depth, despite a single ground line.

0 = NO FIGURE HIGHER THAN ANOTHER OR ONLY ONE FIGURE PRESENT.

1 = ONE FIGURE SHOWN HIGHER THAN ANOTHER.

2 = THREE FIGURES SHOWN, EACH PROGRESSIVELY HIGHER THAN THE PRECEDING FIGURE.

FIGURES PROGRESSIVELY SMALLER: Figures must be 1/4" different in size to be considered smaller. Proportional relationships are considered as for "Figures Progressively Higher."

Credit is also given when three figures are drawn radically different in size but all on the same ground line, creating a successful illusion of distance; and when unusual ground lines were drawn to create different spatial relationships.

Credit

No Credit

Credit

No Credit

0 = NO FIGURE APPROPRIATELY SMALLER THAN ANOTHER.

1 = ONE FIGURE APPROPRIATELY SMALLER THAN ANOTHER.

2 = THREE OR MORE FIGURES, EACH APPROPRIATELY SMALLER.

FIGURE OVERLAPPING FIGURE: A part of one figure is presented in such a way that it covers a part of another figure.

0 = ONLY ONE FIGURE, THUS THERE IS NO OVERLAPPING.

1 = TWO OR MORE FIGURES OVERLAP EACH OTHER.

2 = NO OVERLAPPING, BUT MORE THAN ONE FIGURE REPRESENTED.

OBJECTS PRESENT: Objects to be counted include: toys, grass, trees, playground equipment, and ground when it has been established by the clear presence of a complete horizon line drawn from one side of the drawing space to the other. Multiple horizon lines indicate multiple objects if each of the lines is drawn from one side of the page to the other.

1 = YES, AN OBJECT OR OBJECTS ARE PRESENT.

2 = NO, OBJECTS ARE NOT PRESENT.

POINT PERSPECTIVE: Point perspective is shown in the objects and they appear to recede into the distance. Some evidence of converging lines in two separate instances is necessary in ambiguous cases.

1 = YES, POINT PERSPECTIVE IS PRESENT IN THE OBJECTS.

2 = NO, POINT PERSPECTIVE IS NOT PRESENT.

FIGURE OVERLAPPING OBJECT: Figures overlap objects when they cover a portion of an object. When a complete ground or horizon line is drawn and a figure is shown standing on the ground below that line, the figure overlaps an object (ground). Stick figures overlap an object ONLY if it is clear that the figure is in front of an object, as shown below.

No Credit

No Credit

Credit

Credit

Credit

1 = YES, FIGURE OVERLAPS OBJECT.

2 = NO, FIGURE DOES NOT OVERLAP OBJECT.